



## HGM7120A

HGM7200/7100A series genset controllers are used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measure, alarm protection and “three remote” (remote control, remote measuring and remote communication). The controller adopts large liquid crystal display (LCD) and selectable Chinese, English or other languages interface with easy and reliable operation.

Product Code : 6010049

Power Supply : DC(8-35)V

Case Dimensions : 197\*152\*47(mm)

Panel Cutout : 186\*141(mm)

Operating Temp. : (-25~+70)°C

Weight : 0.75kg

## **COMPLETE DESCRIPTION**

HGM7200/7100A series genset controllers are used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measure, alarm protection and “three remote” (remote control, remote measuring and remote communication). The controller adopts large liquid crystal display (LCD) and selectable Chinese, English or other languages interface with easy and reliable operation.

HGM7200/7100A controller adopts 32 bits micro-processor technology with precision parameters measuring, fixed value adjustment, time setting and threshold adjusting and etc. The majority of parameters can be set using front panel and all the parameters can be set using PC (via USB port) and can be adjusted and monitored with the help of RS485 ports. It can be widely used in a number of automatic genset control system with compact structure, simple connections and high reliability.

## **PERFORMANCE AND CHARACTERISTICS**

HGM7X10, Auto Start Module, controls genset to start or stop automatically by remote start signal.

HGM7X20, Auto Main Failure, updates based on HGM7X10, especially for automatic system composed by generator and mains.

### **Main characteristics**

1. With ARM-based 32-bit CPU, highly integrated hardware, new reliability level;
2. 132x64 LCD with backlight, multilingual interface (including English, Chinese or other languages) which can be chosen at the site, making commissioning convenient for factory personnel;
3. Improved LCD wear-resistance and scratch resistance due to hard screen acrylic;
4. Silicon panel and pushbuttons for better operation in high-temperature environment;
5. RS485 communication port enabling remote control, remote measuring, remote communication via a ModBus protocol (controller with RS485 port only);
6. Equipped with SMS (Short Message Service) function. When genset is alarming, controller can send short messages via SMS automatically to max. 5 telephone numbers. besides, generator status can be controlled and checked using SMS (controller with GSM port only);
7. Equipped with CANBUS port and can communicate with J1939 genset. Not only can you monitoring frequently-used data (such as water temperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but also control starting up, shutdown, raising speed and speed droop via CANBUS port (controller with CAN Bus port only);
8. Suitable for 3-phase 4-wire, 3-phase 3-wire, single phase 2-wire, and 2-phase 3-wire systems with voltage 120/240V and frequency 50/60Hz;

9. Collects and shows 3-phase voltage, current, power parameter and frequency of generator or mains.
10. For Mains, controller has over and under voltage, over and under frequency, loss of phase and phase sequence wrong detection functions; For generator, controller has over and under voltage, over and under frequency, loss of phase, phase sequence wrong, over and reverse power, over current functions.
11. 3 fixed analog sensors (temperature, oil pressure and liquid level);
12. 2 configurable sensors can be set as sensor of temperature or fuel level;
13. Precision measure and display parameters about Engine,
14. Protection: automatic start/stop of the genset, ATS(Auto Transfer Switch) control with perfect fault indication and protection function;
15. All output ports are relay-out;
16. Parameter setting: parameters can be modified and stored in internal EEPROM memory and cannot be lost even in case of power outage; most of them can be adjusted using front panel of the controller and all of them can be modified using PC via USB or RS485 ports.
17. More kinds of curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves;
18. Multiple crank disconnect conditions (speed sensor, oil pressure, generator frequency) are optional;
19. Widely power supply range DC(8~35)V, suitable to different starting battery voltage environment;
20. Event log and real-time clock.
21. Scheduled start & stop generator (can be set as start genset once a day/week/month whether with load or not; also can be set as customer weekly in which users can set the start time separately from Monday to Sunday);
22. Selectivity configuration. Users can choose different configuration by input port.
23. Can be used on pumping units and as an indicating instrument (indicate and alarm are enable only, relay is inhibited );
24. With maintenance function. Actions (warning or shutdown) can be set when maintenance time out;
25. All parameters used digital adjustment, instead of conventional analog modulation with normal potentiometer, more reliability and stability;
26. Waterproof security level IP55 due to rubber seal installed between the controller enclosure and panel fascia;
27. Metal fixing clips enable perfect in high temperature environment;
28. Modular design, self extinguishing ABS plastic enclosure, pluggable connection terminals and embedded installation way; compact structure with easy mounting.

### PARAMETER LIST

Function Item	Parameter
Display	LCD(132*64)

Function Item	Parameter
Operation Panel	Silicon Rubber
Language	Chinese & English & Others
Digital Input	7
Relay Output	8
Analogue Input	5
AMF	●
AC System	1P2W/2P3W/3P3W/3P4W
Alternator Voltage	(15~360)V(ph-N)
Alternator Frequency	50/60Hz
kW/Amp Detecting & Display	●
Programmable Interface	USB
RTC & Event Log	●
Scheduled Start Genset	●
Maintenance	●
ULP	●
DC Supply	DC(8~35)V
Case Dimensions(mm)	197*152*47
Panel Cutout(mm)	186*141
Operating Temp.	(-25~+70)°C